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PRE-APPEAL BRIEF REQUEST FOR REVIEW

Docket Number (Optional)
920522-905833

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Application Number	Filed
10/054,207	January 22, 2002

First Named Inventor
Francois Kermarec

Art Unit	Examiner
2478	Benjamin R. Bruckart

Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request.

This request is being filed with a notice of appeal.

The review is requested for the reason(s) stated on the attached sheet(s).
Note: No more than five (5) pages may be provided.

I am the

☐ applicant/inventor.

☐ assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96)

☑ attorney or agent of record. Registration number 26,935

☐ attorney or agent acting under 37 CFR 1.34.
Registration number if acting under 37 CFR 1.34 _____

/William M. Lee, Jr./
Signature

William M. Lee, Jr.
Typed or printed name

312-214-4800
Telephone number

October 6, 2011
Date

NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.

☑ *Total of 1 forms are submitted.

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE THE APPLICATION OF	)
	) Examiner: Benjamin R. Bruckart
Kermarec, et al.	)
	) Group Art Unit: 2478
SERIAL NO.: 10/054,207	)
	) Customer Number: 23644
FILED: January 22, 2002	)
	) Confirmation No. 4665
FOR: Methods of Establishing Virtual Circuits and of Providing a Virtual Private Network Service Through a Shared Network and Provider Edge Device for Such	) Docket No. 920569-905833

PRE-APPEAL BRIEF REQUEST FOR REVIEW

Honorable Director of Patents and Trademarks
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

Applicant requests review of the final rejection dated April 15, 2011.

It is respectfully submitted that the rejection of independent claim 20 under 35 U.S.C., § 103(a), as being unpatentable over U.S. Patent No. 6765914 (Jain) in view of U.S. Patent No. 6701375 (Walker) in further view of U.S. Patent Publication No. 2002/0124107 (Goodwin) is erroneous. The office action relied on Jain to disclose most features of claim 20, conceding that, "*Jain does not disclose the connection with a virtual circuit in the shared network infrastructure between said two PE devices for forwarding frames including said VLAN ID*" and relied on Walker stating, "*In analogous art, Walker discloses another method of providing VPN services to a shared network infrastructure which discloses determining a routing to a destination CE (i.e. second host) device by issuing flooding address resolution requests (i.e. broadcast) to all other PE devices to determine where the destination device is, and then establishes a virtual circuit between the two PE devices*". Further, the office action admitted that "*Jain-Walker does not explicitly disclose that a switch/router automatically learns the correspondence between the CE device and the VLAN identifier. In analogous art, Goodwin discloses another VLAN communication system, wherein a switch will flood an unknown source MAC address to other*

switches such that the switches will learn the VLAN member shift of the MAC address" (emphasis added).

The interpretation of the prior art by the Examiner is too broad and is erroneous. To establish *prima facie* obviousness, the Patent and Trademark Office must show where each and every element of the claim is taught or suggested in the combination of references. M.P.E.P., § 2143.03. An obviousness inquiry requires looking at a number of factors, including the background knowledge possessed by a person having ordinary skill in the art, to determine whether there was an apparent reason to combine the elements of the prior art in the fashion claimed by the present invention. *KSR Int'l v. Teleflex Inc., 550 U.S. 39, 418 82 U.S.P.Q. 2d (BNA) 1385, 1396 (2007).* For the Patent and Trademark Office, to combine references in an obviousness rejection, the Patent and Trademark Office must identify a reason why a person of ordinary skill in the art would have combined the references. *Ibid.* If the Patent and Trademark Office cannot establish obviousness, the claims are allowable. In this case, the Patent and Trademark Office has failed to show where each and every limitation of the claims is taught or suggested by the prior art. In particular, Jain does not disclose the following **feature 1** of independent claim 20 of the instant invention: "*A method of providing a virtual private network (VPN) service through a shared network infrastructure*".

As the skilled person understands it and as it is also disclosed in the introductory part of the specification of the instant invention, "A *VPN emulates a private network over public or shared infrastructures. When the shared infrastructure is an IP network, the VPN can be based on an IP tunnelling mechanism*" (page 1, lines 8-10). Neither Jain nor Walker nor Goodwin deals with virtual private networks.

Thus, **feature 1** of the instant invention is clearly not disclosed by the prior art.

Moreover, Jain also does not disclose the following **feature 2** of claim 20 of the instant invention "*a plurality of interconnected provider edge (PE) devices having customer edge (CE) interfaces, wherein some of the CE interfaces are allocated to a VPN supporting a plurality of virtual local area networks (VLANs)*".

Jain does not disclose a provider edge interface and a customer edge interface at all. No provider and no customer is involved in the system proposed by Jain. Jain discloses "*a stacked network architecture*" (column 1, line 55). Such a network architecture is "*realized/packaged as a chassis-based product. That is, hosts are coupled to the chassis through local switch ports, and exposed by the chassis to users*" (column 3, lines 39-42). Moreover, Jain clearly does not disclose that a port, alleged by the office action to correspond to a customer edge interface, needs to support a plurality of VLANs as claimed by **feature 2** of claim 20 of the instant invention. This claim language is, for instance, depicted in Fig. 2 of the instant invention where CE-B supports VLANs 3, 9; and where a customer edge interface CE-C supports VLANs 2 and 5. Contrary to that, Jain discloses that one port only belongs to one VLAN. When explaining Fig. 6, Jain discloses "*VLAN IDs are depicted as being stored in these egress lists. In particular, each one of the egress lists 623, 624, 633 and 645 stores a "red" VLAN ID.* Each of the egress lists 625 and 634 stores a "*blue VLAN ID". Each egress list 635, 643 and 644 stores a "green" VLAN ID ... Egress lists 621, 631 and 641, respectively, of the connecting ports 121, 131 and 141 are shown*" (column 5, lines 5-16). Each egress list is associated to a particular port, and each egress list associated to a particular port only stores one VLAN ID. This is further supported by Jain teaching "*each WLAN-defined subnet has a corresponding VLAN ID that is stored in each egress list of a local switch port coupled to a member host of the VLAN-defined subnet*" (column 4, lines 55-58). Thus, Jain clearly does not disclose the above three features of independent claim 20 of the instant invention.

Further, the Examiner relied on Walker to disclose virtual circuits. Walker teaches "*a method for establishing a communication path between two nodes of an intranet without using the conventional path finding and routing techniques associated with networks*" (column 2, lines 51-54). Walker teaches a rather complicated method involving a hand-shake between a first router and a second router, in particular requiring a request and a response. Thus, there is no teaching in the combination of Jain and Walker of **feature 3** of claim 20 of the instant invention: "i*n response to such detection, establishing at least one virtual circuit in the shared network infrastructure between said two PE devices*". Thus, Walker clearly does not disclose **feature 3** of the instant invention.

Moreover, the Examiner relied on Goodwin to teach correspondence between a CE device and a VLAN identifier. Goodwin teaches "*The source learning function may flood the first frame of an unknown MAC. Flooding allows devices to find connectivity to other devices, and VLAN membership to be learned by switches ... The exchange of information may include the MAC address, the 32-bit mask and the Group identifier*" (page 2, [0020]-[0022]). An unknown MAC is not a CE-interface, and an MAC is not a VLAN identifier. Thus, clearly Goodwin adds nothing to the teaching of Jain and Walker to arrive at what is claimed in independent claim 20.

In view of the foregoing, it is clear that the obviousness rejection of claim 20 is erroneous, and claim 20 is allowable. Independent claim 49 is submitted to be similarly allowable over Jain in view of Walker and further in view of Goodwin.

In view of the erroneous rejections of the independent claims, it is believed that the dependent claims are allowable for at least the same reasons as those expressed above in relation to the independent claims.

It is therefore submitted that the Examiner's rejections of the claims of this application are untenable as has been argued by the applicant throughout the prosecution of this application, and were this application to proceed to the Board of Appeals and Interferences, the Examiner would be reversed. The results of this review are therefore awaited.

October 6, 2011

Respectfully submitted,

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